

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - RENEWAL

PERMITTEE

Ferrara Pan Candy Co.
Attn: Albert Maronta
7301 Harrison Street
Forrest Park, Illinois 60130

<u>Application No.:</u> 73010040	<u>I.D. No.:</u> 031090AAY
<u>Applicant's Designation:</u>	<u>Date Received:</u> November 16, 2000
<u>Subject:</u> Candy Manufacturing	
<u>Date Issued:</u> October 23, 2006	<u>Expiration Date:</u> October 23, 2011
<u>Location:</u> 7301 Harrison St., Forrest Park	

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of equipment itemized in Attachment B pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued:
 - i. To limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 ton/year of particulate matter less than 10 microns in diameter (PM₁₀), 100 tons/year of volatile organic material 10 tons/year for any individual Hazardous Air Pollutant (HAP), and 25 tons/year of any combination of such HAPs. As a result, the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
 - ii. To limit the emissions of VOM from the construction of new emission units and other modifications at the source, which occurred without first obtaining construction permit(s) between November 15, 1992 and June 15, 2005 (the period during which the Chicago area was classified as severe nonattainment for ozone), to less than 25 tons/year. As a result, the source is excluded from the requirements of 35 Ill. Adm. Code Part 203, Major Stationary Sources Construction and Modification.
 - iii. To limit the potential emissions of VOM from the source to less than 25 tons/year. As a result, the source is excluded from the requirement of 35 Ill. Adm. Code Part 205, Emission Reduction Market System. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permit(s) for this location.

- 2a. Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission source, except as provided in 35 Ill. Adm. Code 218.302, 218.303, 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 218 Subpart G: Use of Organic Material, shall apply only to photochemically reactive material.
- b. Pursuant to 35 Ill. Adm. Code 218.405(d)(2), all owners or operators of heatset web offset, non-heatset web offset, or sheet-fed offset lithographic printing line(s) are subject to 35 Ill. Adm. Code 218.407 through 218.411, unless the combined emissions of VOM from all lithographic printing line(s) at the source (including solvents used for cleanup operations associated with the lithographic printing line(s)) never exceed 45.5 kg/day (100 lbs/day), as determined in accordance with 35 Ill. Adm. Code 218.411(a)(1)(B), before the application of capture systems and control devices. Offset candy printing will comply with 35 Ill. Adm. Code 218 Subpart H: Printing and Publishing by limiting VOM from all lithographic printing line(s) at the source (including solvents used for cleanup operations associated with the lithographic printing line(s)) never exceed 45.5 kg/day (100 lbs/day), as determined in accordance with 35 Ill. Adm. Code 218.411(a)(1)(B), before the application of capture systems and control devices.
- c. The candy panning rooms are subject to 35 Ill. Adm. Code 218.986(a), which provides that every owner or operator of an emission unit subject to 35 Ill. Adm. Code 218 Subpart TT shall employ emission capture and control equipment which achieves an overall reduction in uncontrolled VOM emissions of at least 81 percent from each emission unit.
3. In the event that the operation of this emission unit results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.
- 4a. Operation of the candy panning rooms and starch molders shall not exceed the following limits:

<u>Process/Material</u>	<u>VOM Usage (Lb/Mo)</u>	<u>VOM Usage (Lb/Yr)</u>	<u>Overall Control Efficiency (%)</u>	<u>VOM Emissions (Lb/Mo)</u>	<u>VOM Emissions (T/Yr)</u>
Candy and Chocolate Panning/Glaze (Total)*	26,250	262,500	92	2,100	10.50
Miscellaneous Glazing (Total)	280	2,800	N/A	280	1.40
Panning/Starch Molding Flavorings (Total)	1,250	12,500	N/A	<u>1,250</u>	<u>6.25</u>
			TOTAL	3,630	18.15

* Controlled by catalytic oxidizer

These limits are based on maximum material usage, maximum VOM contents and when controlled the control efficiency the catalytic oxidizer. Compliance with the annual limits shall be determined from a running total of 12 months of data.

- b. Operation of the five printing lines shall not exceed the following limits:

<u>Process/Material</u>	<u>VOM Usage</u>		<u>VOM Emissions</u>	
	<u>(Lb/Mo)</u>	<u>(Lb/Yr)</u>	<u>(Lb/Mo)</u>	<u>(Tons/Yr)</u>
Confection Ink	413.25	4,959	101.2	0.61
Dilution & Clean-Up Solvent (Total)	872	10,464	872	5.23
		TOTAL	973.2	5.84

These limits are based on the maximum material usage and the maximum VOM contents. Compliance with the annual limits shall be determined from a running total of 12 months of data.

- c. Operations of the starch molding, bagged sugar, and bulk sugar processing shall not exceed the following limits:

<u>Process/Material</u>	<u>Throughput</u>		<u>Emission Factor</u>	<u>PM Emissions</u>	
	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>	<u>(lb/Ton)</u>	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
Starch Molding	209	2500	8	0.84	10
Bagged Sugar	334	4000	1	0.17	2
Bulk Sugar	2084	25000	2	2.1	25
			TOTAL	3.11	37

These limits are based on maximum throughput and standard emission factors. Compliance with the annual limits shall be determined from a running total of 12 months of data.

- d. Operation of fuel combustion emission sources shall not exceed the following limits:

<u>Natural Gas Usage</u>		<u>Pollutant Type</u>	<u>Factor (Lb/mmscf)</u>	<u>Emissions</u>	
<u>(mmscf/Mo)</u>	<u>(mmscf/Yr)</u>			<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
25	300	NOx	100	1.25	15.0
		CO	84	1.05	12.6
		PM	7.6	0.10	1.1
		VOM	5.5	0.07	0.8
		SO ₂	0.6	0.01	0.1

These limits are based on maximum fuel usage and standard emission factors. Compliance with the annual limits shall be determined from a running total of 12 months of data.

- e. Natural gas shall be the only fuel fired in the fuel combustion equipment. Use of any other fuel requires a permit revision.
 - f. This permit is issued based on negligible emissions of particulate matter from the panning operations. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
 - g. This permit is issued based on negligible emissions of particulate matter from the printing operations. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
 - h. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.
5. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(A)(ii), an owner or operator that uses an afterburner to comply with any Section of 35 Ill. Adm. Code Part 218 shall use Illinois EPA and USEPA approved continuous monitoring equipment which is installed, calibrated, maintained, and operated according to vendor specifications at all times the afterburner is in use. The continuous monitoring equipment must monitor for each afterburner which has a catalyst bed, commonly known as a catalytic afterburner, the temperature rise across each catalytic afterburner bed or VOM concentration of exhaust.
- 6a. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR

63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

- b) Pursuant to 35 Ill. Adm. Code 218.411(a)(1)(B) the Permittee shall provide calculations which demonstrate that combined emissions of VOM from all lithographic printing lines (including inks, fountain solutions, and solvents used for cleanup operations associated with the lithographic printing lines) at the source never exceed 45.5 kg/day (100 lbs/day) before the use of capture systems and control devices, as follows:
 - i. To calculate daily emissions of VOM, the owner or operator shall determine the monthly emissions of VOM from all lithographic printing lines at the source (including solvents used for cleanup operations associated with the lithographic printing lines) and divide this amount by the number of days during that calendar month that printing lines at the source were in operation;
 - ii. To determine the VOM content of the inks, fountain solution additives and cleaning solvents, the tests methods and procedures set forth in 35 Ill. Adm. Code 218.409(c) of this 35 Ill. Adm. Code 218 Subpart H shall be used;
 - iii. To determine VOM emissions from inks used on lithographic printing line(s) at the source, an ink emission adjustment factor of 0.05 shall be used in calculating emissions from all non-heatset inks, and a factor of 0.80 shall be used in calculating emissions from all heatset inks to account for VOM retention in the substrate. The VOM content of the ink, as used, shall be multiplied by this factor to determine the amount of VOM emissions from the use of ink on the printing line(s); and
 - iv. To determine VOM emissions from fountain solutions and cleaning solvents used on lithographic printing line(s) at the source, no retention factor is used;
- c) Pursuant to 35 Ill. Adm. Code 218.411 (a)(2) the Permittee shall collect and record either the information specified in subsection (a)(2)(A) or (a)(2)(B) of 35 Ill. Adm. Code 218.411 for all lithographic printing lines at the source, as follows:
 - i. Standard recordkeeping, including the following:
 - A. The name and identification of each fountain solution additive, lithographic ink, and cleaning solvent used on any lithographic printing line, recorded each month;
 - B. A daily record, which shows whether a lithographic printing line at the source was in operation on that day;
 - C. The VOM content and the volume of each fountain solution additive, lithographic ink, and cleaning solvent used on any lithographic printing line, recorded each month;
 - D. The total VOM emissions at the source each month,

determined as the sum of the product of usage and VOM content for each fountain solution additive, cleaning solvent, and lithographic ink (with the applicable ink VOM emission adjustment) used at the source, calculated each month; and

- E. The VOM emissions in lbs/day for the month, calculated in accordance with Section 218.411(a)(1)(B) of 35 Ill. Adm. Code 218 Subpart H;

ii. Purchase and inventory recordkeeping, including the following:

- A. The name, identification, and VOM content of each fountain solution additive, lithographic ink, and cleaning solvent used on any lithographic printing line, recorded each month;
- B. Inventory records from the beginning and end of each month indicating the total volume of each fountain solution additive, lithographic ink, and cleaning solvent to be used on any lithographic printing line at the source;
- C. Monthly purchase records for each fountain solution additive, lithographic ink, and cleaning solvent used on any lithographic printing line at the source;
- D. A daily record, which shows whether a lithographic printing line at the source was in operation on that day;
- E. The total VOM emissions at the source each month, determined as the sum of the product of usage and VOM content for each fountain solution additive, cleaning solvent, and lithographic ink (with the applicable ink VOM emission adjustment) used at the source, calculated each month based on the monthly inventory and purchase records required to be maintained pursuant to subsections (a)(2)(B)(i), (a)(2)(B)(ii) and (a)(2)(B)(iii) of 35 Ill. Adm. Code 218 Subpart H; and
- F. The VOM emissions in lbs/day for the month, calculated in accordance with Section 218.411(a)(1)(B) of 35 Ill. Adm. Code 218 Subpart H.

- d. Pursuant to 35 Ill. Adm. Code 218.991(a)(2), any owner or operator of a VOM emission unit which is subject to the requirements of 35 Ill. Adm. Code 218 Subpart TT and complying by the use of emission capture and control equipment shall collect and record all of the following information each day and maintain the information at the source for a period of three years:

- i. Control device monitoring data;
- ii. A log of operating time for the capture system, control device, monitoring equipment and the associated emission unit; and
- iii. A maintenance log for the capture system, control device and

monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.

- e. The Permittee shall maintain records of the following items:
 - i. Records addressing use of good operating practices for the catalytic oxidizer:
 - A. Records for periodic inspection of the catalytic oxidizer with date, individual performing the inspection, and nature of inspection; and
 - B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
 - ii. The name and identification number, usage, and VOM content (minus water and any compounds which are specifically exempted from the definition of VOM) of each VOM containing material used (lb/mo and ton/yr, wt. %;
 - iii. The throughput of starch molding, bagged sugar, and bulk sugar (ton/mo and ton/yr);
 - iv. Natural gas fuel usage (mmscf/month and mmscf/year); and
 - v. Monthly and Annual emissions of CO, NO_x, PM, SO₂, VOM and HAP from the source with supporting calculations (tons/month and tons/year).
- f. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
- 7a. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
- b. The Permittee shall notify the Illinois EPA in writing if the combined emissions of VOM from all lithographic printing lines (including inks, fountain solutions, and solvents used for cleanup operations associated with the lithographic printing lines) at the source ever exceed 45.5 kg/day (100 lbs/day), before the use of capture systems and control devices, within 30 days after the event occurs. Such notification shall include a copy of all records of such event.

- c. On and after a date consistent with 35 Ill. Adm. Code 218.106, the owner or operator shall notify the Illinois EPA:
 - i. Of any violation of the requirements of 35 Ill. Adm. Code 218 Subpart TT by sending a copy of any record showing a violation to the Illinois EPA within 30 days following the occurrence of the violation;
 - ii. At least 30 calendar days before changing the method of compliance with 35 Ill. Adm. Code 218 Subpart TT, the owner or operator shall comply with all requirements of another method of compliance as specified in 35 Ill. Adm. Code 218.986.
- 8. Two (2) copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

If you have any questions on this, please call Ernie Kierbach at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:ELK:lsm

cc: Illinois EPA, FOS Region 1
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the candy manufacturing facility operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are well below the levels, e.g., 100 tons per year of VOM, 100 ton per year of particulate matter less than 10 microns in diameter (PM₁₀), 10 tons per year for a single HAP, and 25 tons per year for totaled HAP at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

E M I S S I O N S (Tons/Year)							
<u>Emission Unit</u>	<u>CO</u>	<u>NOx</u>	<u>PM</u>	<u>SO2</u>	<u>VOM</u>	Single <u>HAP</u>	Total <u>HAPs</u>
Candy Panning			0.44		18.15		
Candy Printing			0.44		5.84		
Starch molding, bagged sugar, and bulk sugar processing			37.0				
Fuel Combustion	<u>12.6</u>	<u>15.0</u>	<u>1.1</u>	<u>0.1</u>	<u>0.8</u>		
Totals	12.6	15.0	38.98	0.1	24.79	< 10	< 25

ELK:lsm

Attachment B

Equipment Listing:

1. Sugar and starch storage, unloading, and distribution:
 - a. Silo #1 and #2 (600,000 lb each).
 - b. Bucket and screw conveyors.
 - c. 7 sugar use bins (10,000 lb each).
 - d. Wheelabrator dust collector.
 - e. Bagged starch.
 - f. Bagged sugar.
2. Hard candy process:
 - a. 10 gas candy forming hot pans (0.10 mmBtu/hr each).
 - b. 205 candy forming cold pans.
 - c. 82 polishing pans.
 - d. 2 vacuum cookers.
 - e. 2 slab cooling tables.
 - f. 5 forming and sizing machines.
 - g. 5 cooling conveyors.
 - h. 4 sanding machines.
3. Starch molding process:
 - a. 4 mogal kitchens.
 - b. 3 slurry mixing stations.
 - c. 4 flavor and color addition lines.
 - d. 4 starch bucks with baghouses.
 - e. 4 candy depositors.
 - f. 4 rework starch machines with 2 baghouses.
 - g. 4 drying rooms.
 - h. 4 sanding operations.
 - i. 4 oiling operations.
 - j. 4 air laser cleaners vented to baghouse.
 - k. 4 scrap candy remelt kettles.
4. Roasted candy process:
 - a. Old gas roasting oven with cyclone (0.40 mmBtu/hr).
 - b. New gas roasting oven with cyclone (0.40 mmBtu/hr).
 - c. 16 polishing pans with filter.
 - d. 16 cold pans with filter.
 - e. 14 gas hot glazing pans (0.10 mmBtu/hr each)
 - f. 6 cold glazing pans
 - g. Processing room with steam vents.
5. Candy Printing
 - a. 2 offset candy printing units
6. Steam generation and heating equipment:
 - a. 2 gas water heaters (1.2 and 4.72 mmBtu/hr)

b. 6 gas boilers (10.0, 14.6, 14.6, 5.2, 4.2, and 1.2 mmBtu/hr)

7. Miscellaneous Equipment:

- a. Sugar grinding room with wheelabrator dust collector.
- b. Flavor and color mixing room.
- c. Ventilation fans for cold panning and mogal kitchen area.